

## Storm Data and Unusual Weather Phenomena - July 2010

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
<b>IOWA, Northeast</b>				
<b>FAYETTE COUNTY --- 3.0 E WESTGATE [42.77, -91.94]</b>				
	07/06/10 15:10 CST		0	Funnel Cloud
	07/06/10 15:13 CST		0	Source: Law Enforcement
Law enforcement received several reports of funnel clouds between Westgate and Maynard.				
<b>Showers developed and moved along a stationary front extending from northeast Iowa into southwest Wisconsin in the late afternoon hours of July 6th. Law enforcement spotted weak funnel clouds in association with the showers over parts of Fayette County.</b>				
<b>FAYETTE COUNTY --- 1.6 WNW FAIRBANK [42.64, -92.08], 0.7 SW WAUCOMA [43.06, -92.04], 3.3 NE CLERMONT [43.03, -91.62], 7.3 SSE ARLINGTON [42.65, -91.63]</b>				
	07/07/10 06:45 CST		20K	Flash Flood (due to Heavy Rain)
	07/07/10 11:00 CST		0	Source: Emergency Manager
Emergency Management reported several roads across Fayette County received flood damage.				
<b>FAYETTE COUNTY --- 1.9 S OELWEIN MUNI ARPT [42.65, -91.98], 1.3 W STANLEY [42.65, -91.82], 4.2 SSE MAYNARD [42.72, -91.82], 3.0 SSE WESTGATE [42.73, -91.98]</b>				
	07/07/10 06:45 CST		0.58M	Flash Flood (due to Heavy Rain)
	07/07/10 11:00 CST		0	Source: Law Enforcement
Law enforcement reported numerous streets and county roads closed due to flooding in and around the city of Oelwein. Law enforcement reported many homes with basements flooded and some structural damage. Public and cooperative observers estimated rainfall amounts between 630 a.m. and 1100 a.m. CST of 3.20 inches to 5.80 inches around the city of Oelwein. The flooding caused an estimated \$400,000 worth of damage to the city of Oelwein.				
Around the high school, the volume of water overwhelmed the storm sewer. The parking lot had water between 3-4 feet high for about 45 minutes until the drains caught up. This pool of water ran against the school building, causing water to run in under doors, etc. which led to \$18,760 worth of damage to carpet in two school buildings.				
<b>Slow moving thunderstorms with very heavy rainfall moved along a stationary front over northeast Iowa causing flash flooding in the city of Oelwein (Fayette County) in the morning hours of July 7th. This caused numerous streets and county roads to become impassable in and around the city of Oelwein. The fire department reported many homes with basements flooded and some structural damage. Between 7 a.m. and 11 a.m. CST rainfall amounts ranged from 3.20 inches to 5.80 inches around the city of Oelwein. The flooding caused an estimated \$400,000 worth of damage to the city of Oelwein.</b>				
<b>CLAYTON COUNTY --- 0.4 SSW ELKADER [42.84, -91.40], 0.4 S ELKADER [42.84, -91.40], 0.5 S ELKADER [42.84, -91.40], 0.6 S ELKADER [42.84, -91.40], 0.5 SSW ELKADER [42.84, -91.40], 0.5 SSW ELKADER [42.84, -91.40]</b>				
	07/07/10 13:30 CST		0	Flood (due to Heavy Rain)
	07/07/10 16:45 CST		0	Source: River/Stream Gage
Locally heavy rains pushed the Turkey River out of its banks in Elkader on July 7th. The river exceeded the flood stage by a half foot cresting at 12.52 feet.				
<b>CLAYTON COUNTY --- 0.2 NNW LITTLEPORT [42.75, -91.37], 0.3 NNE LITTLEPORT [42.75, -91.37], 0.3 NNE LITTLEPORT [42.75, -91.37], 0.3 NNE LITTLEPORT [42.75, -91.37], 0.3 N LITTLEPORT [42.75, -91.37], 0.2 NNW LITTLEPORT [42.75, -91.37]</b>				
	07/07/10 17:00 CST		0	Flood (due to Heavy Rain)
	07/08/10 03:15 CST		0	Source: River/Stream Gage
Locally heavy rains pushed the Volga River out of its banks in Littleport on July 7th and 8th. The river exceeded the flood stage by over one foot cresting at 13.19 feet.				
<b>CLAYTON COUNTY --- 0.6 N GARBER [42.74, -91.27], 0.9 NNE GARBER [42.74, -91.26], 0.9 NE GARBER [42.74, -91.26], 0.7 NNE GARBER [42.74, -91.26], 0.6 NNE GARBER [42.74, -91.27]</b>				
	07/07/10 20:15 CST		0	Flood (due to Heavy Rain)
	07/08/10 07:00 CST		0	Source: River/Stream Gage
Locally heavy rains pushed the Turkey River out of its banks in the vicinity of Garber on July 7th and 8th. The river exceeded the flood stage by almost a foot cresting at 17.78 feet.				
<b>Rounds of heavy rain in early July pushed the Volga and Turkey Rivers (Clayton County) out of their banks.</b>				

## Storm Data and Unusual Weather Phenomena - July 2010

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
<b>(IA-Z009) HOWARD</b>				
	07/14/10 22:15 CST		5K	High Wind (MAX 56 kt)
	07/14/10 22:15 CST		0	
<p>Outflow from thunderstorms produced damaging winds in parts of northeast Iowa in the late evening hours of July 14th. The strong winds knocked down several trees and power lines near the city of Davis Corners in Howard County.</p>				
<b>ALLAMAKEE COUNTY --- 3.1 ENE CHESTER [43.48, -91.46]</b>				
	07/17/10 23:30 CST		0.50K	Thunderstorm Wind (EG 52 kt)
	07/17/10 23:30 CST		0	Source: COOP Observer
<p>Two trees were blown down blocking a driveway.</p> <p>Thunderstorms developed along an advancing cold front during the evening of July 17th and produced some isolated wind damage across Allamakee County late in the evening.</p>				
<b>CLAYTON COUNTY --- STRAWBERRY PT [42.68, -91.53]</b>				
	07/22/10 06:00 CST		0	Heavy Rain
	07/23/10 06:00 CST		0	Source: COOP Observer
<p>The Strawberry Point COOP observer measured 9.04 inches of rain in the 24 hour period ending at 6 a.m. CST July 23rd.</p>				
<b>FAYETTE COUNTY --- 1.0 E OELWEIN [42.68, -91.88]</b>				
	07/22/10 06:00 CST		0	Heavy Rain
	07/23/10 06:00 CST		0	Source: COOP Observer
<p>The COOP observer 1 mile east of Oelwein measured 10.15 inches of rain in the 24 hour period ending at 6 a.m. CST July 23rd.</p>				
<b>CLAYTON COUNTY --- 0.5 E MONONA [43.05, -91.39], 0.5 E MONONA [43.05, -91.39], 0.5 E MONONA [43.05, -91.39], 0.5 E MONONA [43.05, -91.39]</b>				
	07/22/10 16:04 CST		0	Flood (due to Heavy Rain)
	07/22/10 18:15 CST		0	Source: Law Enforcement
<p>Officers reported street flooding in the town of Monona.</p>				
<b>CLAYTON COUNTY --- 1.5 ENE EDGEWOOD [42.68, -91.40], 1.6 ENE EDGEWOOD [42.68, -91.40], 1.6 ENE EDGEWOOD [42.67, -91.40], 1.5 ENE EDGEWOOD [42.68, -91.40]</b>				
	07/22/10 20:05 CST		0	Flood (due to Heavy Rain)
	07/22/10 23:30 CST		0	Source: Fire Department/Rescue
<p>The Edgewood Fire Department reported that Bear Creek had rose out of its banks and caused minor flooding.</p>				
<b>FAYETTE COUNTY --- OELWEIN [42.68, -91.90]</b>				
	07/23/10 01:26 CST		2K	Lightning
	07/23/10 01:26 CST		0	Source: Newspaper
<p>Lightning struck a house chimney blowing bricks into the street. No fire occurred from the lightning strike.</p>				
<b>FAYETTE COUNTY --- 1.3 SSW OELWEIN [42.66, -91.91], 1.3 SSW OELWEIN [42.66, -91.91], 1.3 SSW OELWEIN [42.66, -91.91], 1.3 SSW OELWEIN [42.66, -91.91]</b>				
	07/23/10 02:15 CST		0	Flood (due to Heavy Rain)
	07/23/10 05:15 CST		0	Source: Trained Spotter
<p>Water from heavy rain was about a foot deep at the intersection of 10th Ave SE and Frederick in the city of Oelwein. A total of 6.23 inches of rain fell in the previous 24 hours.</p>				
<b>FAYETTE COUNTY --- 2.7 S OELWEIN [42.64, -91.91], 2.7 SSW OELWEIN [42.64, -91.91], 2.7 SSW OELWEIN [42.64, -91.91], 2.6 S OELWEIN [42.64, -91.91]</b>				
	07/23/10 06:30 CST		5K	Flood (due to Heavy Rain)
	07/23/10 10:30 CST		0	Source: Law Enforcement
<p>Flood waters from heavy rain caused State Highways 150 and 281 to be closed on the south side of the city of Oelwein. Several other reports of city streets flooded as well as water in basements were also received.</p>				

## Storm Data and Unusual Weather Phenomena - July 2010

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
<b>FAYETTE COUNTY --- 0.4 NW OELWEIN [42.68, -91.91], 0.3 WNW OELWEIN [42.68, -91.90], 0.3 WNW OELWEIN [42.68, -91.91], 0.4 NW OELWEIN [42.68, -91.91], 0.4 WNW OELWEIN [42.68, -91.91], 0.4 NW OELWEIN [42.68, -91.91]</b>				
	07/23/10 07:00 CST		0	Flood (due to Heavy Rain)
	07/23/10 11:15 CST		0	Source: Fire Department/Rescue
Nearly ten inches of rain (9.93 inches) in Oelwein caused Dry Run Creek to go out of its banks.				
Several rounds of thunderstorms developed along a slow moving cold front. These thunderstorms stretched across much of southern Wisconsin into north central and central Iowa. The thunderstorms tracked repeatedly over the same areas dropping several inches of rain across Fayette and Clayton counties which resulted in flooding problems on July 22nd into the 23rd.				
<b>CLAYTON COUNTY --- 0.6 N GARBER [42.74, -91.27], 0.9 NE GARBER [42.74, -91.26], 0.9 NE GARBER [42.74, -91.26], 0.7 NNE GARBER [42.74, -91.26], 0.5 N GARBER [42.74, -91.27]</b>				
	07/22/10 23:45 CST		0	Flood (due to Heavy Rain)
	07/25/10 08:45 CST		0	Source: River/Stream Gage
Locally heavy rains pushed the Turkey River out of its banks twice in the vicinity of Garber from July 22nd through the 25th. The river exceeded the flood stage by almost seven feet cresting at 23.98 feet on the 23rd, briefly fell below flood stage and then exceeded the flood stage by over seven feet on the 24th cresting at 24.05 feet.				
<b>CLAYTON COUNTY --- 0.2 NNW LITTLEPORT [42.75, -91.37], 0.2 NNW LITTLEPORT [42.75, -91.37], 0.3 NNE LITTLEPORT [42.75, -91.37], 0.3 NNE LITTLEPORT [42.75, -91.37], 0.3 NNE LITTLEPORT [42.75, -91.37], 0.3 N LITTLEPORT [42.75, -91.37]</b>				
	07/23/10 05:30 CST		0	Flood (due to Heavy Rain)
	07/25/10 16:30 CST		0	Source: River/Stream Gage
Locally heavy rains pushed the Volga River out of its banks in Littleport from July 23rd through the 25th. The river exceeded the flood stage by over seven feet cresting at 19.23 feet.				
Rounds of heavy rain in late July pushed the Volga and Turkey Rivers (Clayton County) out of their banks for the second time during the month.				
<b>FAYETTE COUNTY --- 0.4 WNW ARLINGTON [42.75, -91.68], 0.4 WNW ARLINGTON [42.75, -91.68], 0.4 WNW ARLINGTON [42.75, -91.68], 0.4 WNW ARLINGTON [42.75, -91.68]</b>				
	07/23/10 22:20 CST		0	Flood (due to Heavy Rain)
	07/24/10 01:30 CST		0	Source: Broadcast Media
Main street in the town of Arlington was reported to be impassable due to rising water.				
<b>FAYETTE COUNTY --- 0.6 W OELWEIN [42.68, -91.91], 0.6 W OELWEIN [42.68, -91.91], 0.7 W OELWEIN [42.68, -91.91], 0.7 W OELWEIN [42.68, -91.91], 0.7 W OELWEIN [42.68, -91.91]</b>				
	07/23/10 22:37 CST		0	Flood (due to Heavy Rain)
	07/24/10 01:45 CST		0	Source: Amateur Radio
Amateur radio operators reported 5 to 6 inches of water over State Highways 3 and 150 in the city of Oelwein. Also, about 9 miles east of Oelwein, water covered State Highway 3 at the intersection with County Road W45.				
<b>FAYETTE COUNTY --- 1.6 WNW FAIRBANK [42.64, -92.08], 5.0 NW WESTGATE [42.82, -92.08], 2.1 ESE WADENA [42.82, -91.61], 7.7 SSE ARLINGTON [42.65, -91.61]</b>				
	07/23/10 23:00 CST		75K	Flood (due to Heavy Rain)
	07/24/10 10:00 CST		0	Source: Law Enforcement
Several gravel roads are washed out across the southern part of Fayette County. Several homes sustained damages as well, mainly to basements with a few basement walls pushed in by the water. A three day rainfall total of 12.18 inches was measured at 6 a.m. CST July 24th about three quarters of a mile northwest of Oelwein.				
<b>FAYETTE COUNTY --- 2.0 WNW ARLINGTON [42.76, -91.71], 2.8 WNW ARLINGTON [42.76, -91.72], 2.9 WNW ARLINGTON [42.76, -91.72], 2.0 WNW ARLINGTON [42.76, -91.71]</b>				
	07/23/10 23:36 CST		5K	Flood (due to Heavy Rain)
	07/24/10 02:45 CST		0	Source: Amateur Radio
Amateur radio operators reported gravel road shoulders washed out in many spots along State Highway 187. Also, several acres of farm fields were under water but there were no subsequent reports as to whether the crops were damaged.				

## Storm Data and Unusual Weather Phenomena - July 2010

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
<b>CLAYTON COUNTY --- 4.4 WSW STRAWBERRY PT [42.65, -91.60], 3.5 WNW VOLGA [42.82, -91.60], 1.0 W GUTTENBERG ARPT [42.82, -91.12], 2.7 W TURKEY RIVER [42.74, -91.10], 1.9 E MILLVILLE [42.70, -91.03], 8.8 ESE MILLVILLE [42.66, -90.91]</b>				
	07/24/10 00:00 CST		80K	Flood (due to Heavy Rain)
	07/24/10 10:00 CST		0	Source: Law Enforcement
Several gravel roads have been washed out across the southern part of Clayton County. Also, in the vicinity of Garber, water was flooding some corn fields and County Road C7X had water over it. Some homes also sustained damage with some basement walls collapsing. A three day rainfall total of 12.23 inches was measured at 6 a.m. CST July 24th in Strawberry Point and 6.69 inches at Lock and Dam 10 in Guttenberg.				
<b>FLOYD COUNTY --- 1.2 SE WALLER [43.07, -92.63], 1.3 SE WALLER [43.07, -92.63], 1.3 SE WALLER [43.07, -92.63], 1.3 SE WALLER [43.07, -92.63]</b>				
	07/24/10 01:04 CST		0	Flood (due to Heavy Rain)
	07/24/10 04:00 CST		0	Source: Broadcast Media
U.S. Highway 18 was under water approximately 1 mile east of the city of Charles City.				
<b>HOWARD COUNTY --- 5.0 NNW ELMA [43.32, -92.49]</b>				
	07/24/10 01:10 CST		0.15M	Thunderstorm Wind (EG 61 kt)
	07/24/10 01:10 CST		0	Source: Newspaper
Four steel grain bins, a barn, well house and two machine sheds were destroyed by thunderstorms winds.				
<b>HOWARD COUNTY --- 0.5 E ELMA [43.25, -92.44]</b>				
	07/24/10 01:13 CST		5K	Thunderstorm Wind (EG 61 kt)
	07/24/10 01:13 CST		0	Source: Public
The brother of a NWS employee reported 5 foot diameter trees snapped off and some roofs were damaged.				
<b>FLOYD COUNTY --- 1.0 E CHARLES CITY [43.07, -92.68]</b>				
	07/24/10 01:18 CST		2K	Thunderstorm Wind (EG 52 kt)
	07/24/10 01:18 CST		0	Source: County Official
Several trees were blown down in Charles City by estimated 50 to 60 mph winds.				
<b>FLOYD COUNTY --- 3.0 N COLWELL [43.19, -92.62]</b>				
	07/24/10 01:20 CST		50K	Thunderstorm Wind (EG 52 kt)
	07/24/10 01:20 CST		0	Source: Newspaper
A metal grain bin was destroyed by thunderstorm winds.				
<b>HOWARD COUNTY --- 0.5 E CRESCO MUNI ARPT [43.37, -92.12]</b>				
	07/24/10 01:26 CST		70K	Thunderstorm Wind (EG 61 kt)
	07/24/10 01:26 CST		0	Source: Law Enforcement
Storms blew the roof off a car dealership with debris blown several blocks. At a nearby restaurant, picnic tables were lifted, windows busted and trees blown down. Signs for area businesses were also destroyed. A wholesale greenhouse had most of the glass panels on the roof of one building destroyed where the winds may have been locally higher. Another business close to the greenhouse also had the roof destroyed.				
<b>Thunderstorms developed along a cold front and swept across northeast Iowa for the second consecutive night. These storms brought additional heavy rains producing more flooding problems on July 23rd into the 24th. The winds were also strong enough with the storms to create some wind damage. Clayton, Fayette and Howard Counties were included in a Presidential Disaster Declaration.</b>				

### MINNESOTA, Southeast

<b>WABASHA COUNTY --- 0.5 W LAKE CITY [44.45, -92.28]</b>				
	07/14/10 14:22 CST		0.20K	Thunderstorm Wind (EG 52 kt)
	07/14/10 14:22 CST		0	Source: COOP Observer
A cooperative observer estimated a 60 miles per hour wind gust with wooden picnic tables blown over in the city of Lake City.				
<b>WABASHA COUNTY --- 0.5 W LAKE CITY [44.45, -92.28]</b>				

## Storm Data and Unusual Weather Phenomena - July 2010

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
	07/14/10 14:25 CST		0	Thunderstorm Wind (MG 56 kt)
	07/14/10 14:25 CST		0	Source: Fire Department/Rescue

The fire department measured a wind gust of 65 miles per hour in the city of Lake City.

---

### OLMSTED COUNTY --- 1.2 NE ORONOCO [44.18, -92.51]

07/14/10 18:57 CST	0	Funnel Cloud
07/14/10 19:02 CST	0	Source: Trained Spotter

---

### MOWER COUNTY --- 0.2 WNW MAPLEVIEW [43.68, -92.98]

07/14/10 19:12 CST	0	Thunderstorm Wind (EG 52 kt)
07/14/10 19:12 CST	0	Source: Broadcast Media

KAAL television station measured a 60 miles per hour wind gust in the city of Austin.

---

### MOWER COUNTY --- 0.8 SSW AUSTIN [43.66, -92.93]

07/14/10 19:15 CST	0	Thunderstorm Wind (MG 51 kt)
07/14/10 19:15 CST	0	Source: AWOS

The automated weather observing equipment at the Austin Municipal airport measured a wind gust of 59 miles per hour.

---

### OLMSTED COUNTY --- 1.7 NE (RST) ROCHESTER MUNI [43.94, -92.48]

07/14/10 19:35 CST	0	Thunderstorm Wind (MG 52 kt)
07/14/10 19:35 CST	0	Source: COOP Observer

A cooperative observer measured a wind gust of 60 miles per hour with branches broken off trees.

---

### WINONA COUNTY --- 1.5 W WINONA [44.05, -91.68]

07/14/10 20:13 CST	1.50K	Thunderstorm Wind (EG 52 kt)
07/14/10 20:13 CST	0	Source: Emergency Manager

The emergency manager reported trees down on the west side of the city of Winona.

---

### HOUSTON COUNTY --- 1.0 ENE RIVER JCT [43.84, -91.30]

07/14/10 20:45 CST	1K	Thunderstorm Wind (EG 52 kt)
07/14/10 20:45 CST	0	Source: Public

The public reported two trees uprooted and an 18 inch branch broken off a tree.

---

### HOUSTON COUNTY --- 1.0 W LA CRESCENT [43.83, -91.30]

07/14/10 20:45 CST	0	Thunderstorm Wind (EG 52 kt)
07/14/10 20:45 CST	0	Source: Trained Spotter

A trained spotter estimated a wind gust of 60 miles per hour in the city of La Crescent.

**A cold front tracked west to east across southeast Minnesota during the evening hours of July 14th. A line of severe thunderstorms developed along the cold front and produced a funnel cloud in Olmsted County, blew down trees in Winona County, and wind gust of up to 60 miles per hour across Mower and Olmsted Counties.**

---

### MOWER COUNTY --- 0.9 ENE SARGEANT [43.80, -92.80]

07/16/10 16:40 CST	0.25K	Thunderstorm Wind (EG 52 kt)
07/16/10 16:40 CST	0	Source: Law Enforcement

Several large trees were blown down.

---

### MOWER COUNTY --- WALTHAM [43.82, -92.88]

07/16/10 16:40 CST	0	Hail (1.75 in)
07/16/10 16:40 CST	0	Source: Public

**Isolated storms developed across southeast Minnesota during the late afternoon of July 16th. These storms produced some localized wind damage and large hail across Mower County.**

## Storm Data and Unusual Weather Phenomena - July 2010

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
<b>WINONA COUNTY --- 1.5 W WINONA [44.05, -91.68]</b>				
	07/17/10 17:05 CST		0	Hail (0.75 in)
	07/17/10 17:05 CST		0	Source: Emergency Manager
<b>WINONA COUNTY --- 1.9 NNE NODINE [43.93, -91.44]</b>				
	07/17/10 17:20 CST		0	Hail (1.50 in)
	07/17/10 17:20 CST	1	0	Source: Public
A motorcycle passenger was hit on the head by hail on Interstate 90 near Nodine. The passenger was taken by ambulance to a hospital.				
<b>WINONA COUNTY --- 0.6 ENE WINONA [44.05, -91.64], 0.7 ENE WINONA [44.05, -91.64], 0.6 E WINONA [44.05, -91.64], 0.5 E WINONA [44.05, -91.64]</b>				
	07/17/10 17:30 CST		0	Flood (due to Heavy Rain)
	07/17/10 19:30 CST		0	Source: Emergency Manager
Street flooding was reported in the city of Winona.				
<b>HOUSTON COUNTY --- 1.2 SW HOKAH [43.76, -91.35]</b>				
	07/17/10 17:50 CST		0	Hail (1.50 in)
	07/17/10 17:50 CST		0	Source: Public
<b>HOUSTON COUNTY --- 2.0 WSW HOKAH [43.76, -91.37]</b>				
	07/17/10 17:53 CST		0	Hail (1.75 in)
	07/17/10 17:53 CST		0	Source: Trained Spotter
<b>HOUSTON COUNTY --- 3.2 SW HOKAH [43.74, -91.38]</b>				
	07/17/10 18:20 CST		0	Hail (1.00 in)
	07/17/10 18:20 CST		0	Source: Law Enforcement
<b>HOUSTON COUNTY --- 2.1 WSW HOKAH [43.76, -91.37]</b>				
	07/17/10 18:27 CST		0	Hail (1.25 in)
	07/17/10 18:27 CST		0	Source: Public
<b>HOUSTON COUNTY --- 2.6 WSW HOKAH [43.75, -91.37]</b>				
	07/17/10 18:30 CST		2K	Thunderstorm Wind (EG 52 kt)
	07/17/10 18:30 CST		0	Source: Law Enforcement
Several trees were blown down southwest of Hokah along Highway 44.				
<b>MOWER COUNTY --- 1.0 WNW AUSTIN [43.67, -92.95], 1.0 WNW AUSTIN [43.67, -92.95], 1.0 WNW AUSTIN [43.67, -92.95], 1.0 WNW AUSTIN [43.67, -92.95]</b>				
	07/17/10 22:20 CST		0	Flood (due to Heavy Rain)
	07/18/10 00:30 CST		0	Source: Law Enforcement
Water covered part of the east bound lanes of Interstate 90 near mile marker 179.5. Also, some street flooding occurred in different sections of the city of Austin.				
Scattered thunderstorms developed along a trough of low pressure in a very warm and moist air mass. These storms dropped large hail up to the size of ping pong and golf balls over parts of Winona and Houston Counties. Some wind damage also occurred in Houston County. These storms also produced very heavy rain that led to urban flooding in cities of Winona (Winona County) and Austin (Mower County).				
<b>OLMSTED COUNTY --- 3.5 S ROCHESTER [43.98, -92.48]</b>				
	07/19/10 14:50 CST		0	Funnel Cloud
	07/19/10 14:50 CST		0	Source: Broadcast Media
An area of showers and a few thunderstorms produced a funnel cloud just south of the city of Rochester.				
An area of showers with embedded thunderstorms developed during the afternoon of July 19th across southeast Minnesota. A funnel cloud was sighted with one of the showers near Rochester (Olmsted County).				

## Storm Data and Unusual Weather Phenomena - July 2010

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
<b>MOWER COUNTY --- 0.7 SSW MAPLEVIEW [43.67, -92.99]</b>				
	07/27/10 22:00 CST		0.50K	Lightning
	07/27/10 22:00 CST		0	Source: Newspaper
Power lines were knocked down leading to a few sparks and some smoke on the roof of a house, but a fire did not start.				
<b>Thunderstorms developed across southeast Minnesota during the evening hours of July 27th. These storms created only some minor damages with power lines down in Austin (Mower County).</b>				
<b>WISCONSIN, Southwest</b>				
<b>CRAWFORD COUNTY --- 2.0 WNW SOLDIERS GROVE [43.41, -90.81], 1.7 WNW SOLDIERS GROVE [43.41, -90.80], 1.7 WNW SOLDIERS GROVE [43.41, -90.80], 2.0 WNW SOLDIERS GROVE [43.41, -90.81]</b>				
	07/05/10 05:00 CST		0	Flood (due to Heavy Rain)
	07/05/10 07:50 CST		5K	Source: Other Federal Agency
United States Department of Agricultural official reported a small acreage of potatoes were destroyed by flash flooding in northeast Crawford County.				
<b>A tropical airmass ahead of a slow moving cold front allowed heavy rain to develop over portions of southwest Wisconsin in the morning hours of July 5th. This heavy rain caused isolated flash flooding and destroyed a small acreage of potatoes in northeastern Crawford County.</b>				
<b>VERNON COUNTY --- 2.8 NNE KICKAPOO CENTER [43.50, -90.67], 2.9 NNE KICKAPOO CENTER [43.51, -90.67], 2.8 ESE LIBERTY [43.51, -90.68], 2.7 ESE LIBERTY [43.51, -90.68], 2.8 NNE KICKAPOO CENTER [43.51, -90.67], 2.8 NNE KICKAPOO CENTER [43.50, -90.67]</b>				
	07/07/10 15:40 CST		0	Flood (due to Heavy Rain)
	07/08/10 00:00 CST		0	Source: River/Stream Gage
Locally heavy rains pushed the Kickapoo River out of its banks in Viola on July 7th and 8th. The river exceeded the flood stage by less than a half foot cresting at 14.2 feet.				
<b>CRAWFORD COUNTY --- 3.2 NNW BELL CENTER [43.32, -90.85], 3.1 NNW BELL CENTER [43.32, -90.85], 3.0 NNW BELL CENTER [43.32, -90.85], 3.0 NNW BELL CENTER [43.32, -90.85], 3.1 NNW BELL CENTER [43.32, -90.85], 3.2 NNW BELL CENTER [43.32, -90.85]</b>				
	07/08/10 01:30 CST		0	Flood (due to Heavy Rain)
	07/08/10 17:30 CST		0	Source: River/Stream Gage
Locally heavy rains pushed the Kickapoo River out of its banks in Gays Mills on July 8th. The river just exceeded the flood stage cresting at 13.05 feet.				
<b>Rounds of heavy rain in early July pushed the Kickapoo River out of its banks at Viola (Vernon County) and Gays Mills (Crawford County).</b>				
<b>GRANT COUNTY --- 1.7 ESE NORTH ANDOVER [42.81, -90.94], 2.0 W FIVE PTS [42.81, -90.84], 2.2 SE BEETOWN [42.78, -90.85], 3.5 WSW BEETOWN [42.77, -90.94]</b>				
	07/07/10 19:55 CST		10K	Flash Flood (due to Heavy Rain)
	07/08/10 02:00 CST		0	Source: Emergency Manager
The emergency manager reported erosion to roadways around the city of Beetown.				
<b>Slow moving thunderstorms along a cold front brought heavy rainfall across parts of southwest Wisconsin in the late evening hours of July 7th. This caused erosion to roadways around Beetown in central Grant County.</b>				
<b>ADAMS COUNTY --- 4.0 N BIG FLATS [44.18, -89.81]</b>				
	07/10/10 14:13 CST		0	Hail (0.75 in)
	07/10/10 14:13 CST		0	Source: Law Enforcement
A sheriff deputy reported dime size hail at Highway 13 and County Road O.				
<b>JUNEAU COUNTY --- 5.4 NE NEW MINER [44.23, -89.96]</b>				
	07/10/10 14:53 CST		0	Hail (1.00 in)
	07/10/10 14:53 CST		0	Source: Public
The public reported one inch diameter size hail in the Township of Armenia in northeast Juneau County.				

## Storm Data and Unusual Weather Phenomena - July 2010

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
<b>ADAMS COUNTY --- 2.5 N BIG FLATS [44.16, -89.81]</b>				
	07/10/10 15:05 CST		0	Hail (0.75 in)
	07/10/10 15:05 CST		0	Source: Law Enforcement
Law enforcement reported dime size hail at County Road O and Highway 13.				
<b>An upper level disturbance moved into central Wisconsin in the afternoon hours of July 10th. Strong to severe thunderstorms developed and produced large hail up to one inch in diameter in northern Adams and Juneau Counties.</b>				
<b>TAYLOR COUNTY --- 7.0 SSW POLLEY [45.04, -90.86]</b>				
	07/14/10 11:26 CST		1K	Thunderstorm Wind (EG 56 kt)
	07/14/10 11:26 CST		0	Source: Public
The public reported large branches and power lines down in the extreme southwest corner of Taylor County.				
<b>TAYLOR COUNTY --- 2.6 SSW LUBLIN [45.05, -90.74]</b>				
	07/14/10 11:29 CST		1.50K	Thunderstorm Wind (EG 61 kt)
	07/14/10 11:29 CST		0	Source: Public
The public reported several trees down three miles southwest of Lublin.				
<b>CLARK COUNTY --- OWEN [44.95, -90.57]</b>				
	07/14/10 12:06 CST		1K	Thunderstorm Wind (EG 56 kt)
	07/14/10 12:06 CST		0	Source: Fire Department/Rescue
The fire department reported trees down in the city of Owen.				
<b>CLARK COUNTY --- 3.6 SW RIPLINGER [44.80, -90.46], 3.1 NNE VEEFKIND [44.74, -90.36]</b>				
	07/14/10 12:10 CST		1K	Thunderstorm Wind (EG 52 kt)
	07/14/10 12:20 CST		0	Source: Trained Spotter
Trained spotters reported trees down and estimated wind gust of 60 miles per hour northeast and east of Loyal.				
<b>CLARK COUNTY --- 0.5 WNW ABBOTSFORD [44.95, -90.33]</b>				
	07/14/10 12:14 CST		1K	Thunderstorm Wind (EG 56 kt)
	07/14/10 12:14 CST		0	Source: Amateur Radio
Amateur radio operators reported a tree down and a power outage in the city of Abbotsford.				
<b>A complex of severe thunderstorms developed along a cold front over Minnesota and then rolled across central Wisconsin during the late morning and early afternoon of July 14th. These storms produced damaging winds which knocked down trees and created power outages.</b>				
<b>MONROE COUNTY --- 2.2 WNW KIRBY [44.12, -90.57]</b>				
	07/14/10 15:00 CST		0	Heavy Rain
	07/15/10 01:00 CST		0	Source: COOP Observer
Cooperative observers reported around six inches of rain five miles southwest of Warrens and three and a half inches of rain one mile south of Tunnel City.				
<b>TREMPEALEAU COUNTY --- 2.2 E OSSEO [44.58, -91.18]</b>				
	07/14/10 15:00 CST		0	Hail (2.00 in)
	07/14/10 15:00 CST		0	Source: Trained Spotter
A trained spotter estimated up to two inch diameter size hail two miles east of Osseo.				
<b>TREMPEALEAU COUNTY --- OSSEO [44.58, -91.22]</b>				
	07/14/10 15:00 CST		0	Thunderstorm Wind (EG 65 kt)
	07/14/10 15:00 CST		0	Source: Fire Department/Rescue
The fire department estimated wind gusts of 75 miles per hour in the city of Osseo.				
<b>TREMPEALEAU COUNTY --- OSSEO [44.58, -91.22]</b>				



## Storm Data and Unusual Weather Phenomena - July 2010

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
	07/14/10 15:00 CST		0	Hail (1.25 in)
	07/14/10 15:05 CST		0	Source: Fire Department/Rescue
The fire department and public reported one to one and a quarter inch diameter sized hail in the city of Osseo.				
<b>JACKSON COUNTY --- 1.2 SSE MILLSTON [44.18, -90.64]</b>				
	07/14/10 15:10 CST		13K	Lightning
	07/14/10 16:20 CST		0	Source: Newspaper
Lightning caused a wood frame cabin to catch fire near the town of Millston.				
<b>TAYLOR COUNTY --- 5.3 SW POLLEY [45.07, -90.87]</b>				
	07/14/10 15:14 CST		15K	Thunderstorm Wind (EG 61 kt)
	07/14/10 15:14 CST		0	Source: Law Enforcement
Law enforcement reported sheds destroyed, power lines down and a roof torn off a mobile home in the town of Taft.				
<b>JACKSON COUNTY --- 2.1 NE NORTH BRANCH [44.47, -90.97], 1.4 E MERRILLAN [44.45, -90.80]</b>				
	07/14/10 15:16 CST		5K	Tornado (EF0, L: 8.69 mi , W: 150 yd)
	07/14/10 15:43 CST		0	Source: NWS Storm Survey
A National Weather Service survey team surveyed intermittent EF0 tree damage along Town House Road through the village of Merrilan to the Clark and Jackson County line.				
<b>BUFFALO COUNTY --- 2.5 ESE WAUMANDEE [44.29, -91.65]</b>				
	07/14/10 15:20 CST		8K	Thunderstorm Wind (EG 56 kt)
	07/14/10 15:20 CST		0	Source: Law Enforcement
Law enforcement reported trees down and buildings damaged.				
<b>TAYLOR COUNTY --- 0.5 WSW GILMAN [45.17, -90.81]</b>				
	07/14/10 15:22 CST		1K	Thunderstorm Wind (EG 61 kt)
	07/14/10 15:22 CST		0	Source: Law Enforcement
Law enforcement reported a power outage in the city of Gilman.				
<b>JACKSON COUNTY --- 3.0 E LEVIS [44.54, -91.04]</b>				
	07/14/10 15:40 CST		8K	Thunderstorm Wind (EG 61 kt)
	07/14/10 15:40 CST		0	Source: Law Enforcement
Law enforcement reported numerous trees and power lines down across northern Jackson County.				
<b>TAYLOR COUNTY --- 0.8 NNE MEDFORD [45.14, -90.34]</b>				
	07/14/10 15:40 CST		2K	Thunderstorm Wind (EG 61 kt)
	07/14/10 15:40 CST		0	Source: Emergency Manager
The emergency manager reported power lines and a tree down in the city of Medford.				
<b>CLARK COUNTY --- 5.2 WNW LAKE ARBUTUS [44.45, -90.80], 0.7 NNW SHERWOOD [44.44, -90.35]</b>				
	07/14/10 15:43 CST		5K	Tornado (EF1, L: 22.08 mi , W: 150 yd)
	07/14/10 16:13 CST		0	Source: NWS Storm Survey
A National Weather Service survey team surveyed intermittent EF1 tree damage beginning at the Jackson and Clark County line, then east along Ballard Road and County Road Z in extreme southern Clark County. The tornado was the strongest in the vicinity of Lake Arbutus where extensive tree damage was found on the north side of the lake near Bush Road. The tornado track appeared to be just north of this area with most of the damage caused by winds around the south side of the storm (rear flank downdrafts).				
<b>CLARK COUNTY --- 0.2 ENE HUMBIRD [44.53, -90.90]</b>				
	07/14/10 15:46 CST		1.50K	Thunderstorm Wind (EG 61 kt)
	07/14/10 15:46 CST		0	Source: Public
The public reported several trees down and estimated wind gusts of sixty to seventy miles per hour.				

## Storm Data and Unusual Weather Phenomena - July 2010

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
<b>CLARK COUNTY --- 4.4 WNW LAKE ARBUTUS [44.46, -90.78]</b>				
	07/14/10 15:50 CST		1K	Thunderstorm Wind (EG 61 kt)
	07/14/10 15:50 CST		0	Source: Amateur Radio
Amateur radio operators reported trees down at the intersection of Highway 95 and County Road J.				
<b>MONROE COUNTY --- 1.4 SSW TUNNEL CITY [43.98, -90.58]</b>				
	07/14/10 16:25 CST		0	Thunderstorm Wind (EG 52 kt)
	07/14/10 16:25 CST		0	Source: Amateur Radio
Amateur radio operators estimated a 60 miles per hour wind gust.				
<b>MONROE COUNTY --- 3.5 NE WILTON [43.85, -90.47]</b>				
	07/14/10 16:45 CST		0.50K	Thunderstorm Wind (EG 52 kt)
	07/14/10 16:45 CST		0	Source: Trained Spotter
A trained spotter reported a fifteen inch diameter tree down on Highway 131.				
<b>BUFFALO COUNTY --- 0.5 E BUFFALO CITY [44.23, -91.84]</b>				
	07/14/10 19:34 CST		1K	Thunderstorm Wind (EG 56 kt)
	07/14/10 19:34 CST		0	Source: Law Enforcement
Law enforcement reported trees down near the city of Cochrane.				
<b>BUFFALO COUNTY --- 2.6 SE WAUMANDEE [44.27, -91.66]</b>				
	07/14/10 19:45 CST		4K	Thunderstorm Wind (EG 56 kt)
	07/14/10 19:45 CST		0	Source: Law Enforcement
Law enforcement reported a chicken barn damaged two miles southeast of Waumandee.				
<b>TREMPEALEAU COUNTY --- 2.0 W ARCADIA [44.25, -91.54]</b>				
	07/14/10 19:52 CST		0	Thunderstorm Wind (EG 52 kt)
	07/14/10 19:52 CST		0	Source: Law Enforcement
Law enforcement estimated a 60 miles per hour wind gust two miles west of Arcadia.				
<b>LA CROSSE COUNTY --- 0.2 WSW (LSE)LA CROSSE MUNI [43.88, -91.25]</b>				
	07/14/10 20:43 CST		0	Thunderstorm Wind (MG 52 kt)
	07/14/10 20:43 CST		0	Source: ASOS
The automated weather observing equipment at the La Crosse Municipal airport measured a wind gust of sixty miles per hour.				
<b>LA CROSSE COUNTY --- 1.6 E LA CROSSE [43.80, -91.22]</b>				
	07/14/10 20:48 CST		1K	Thunderstorm Wind (EG 52 kt)
	07/14/10 20:48 CST		0	Source: Amateur Radio
Amateur radio operators reported trees down in the city of La Crosse.				
<b>TAYLOR COUNTY --- 1.1 NE MEDFORD [45.14, -90.34]</b>				
	07/14/10 20:55 CST		0.50K	Thunderstorm Wind (EG 56 kt)
	07/14/10 20:55 CST		0	Source: Emergency Manager
The emergency manager reported trees down in Medford.				
<b>JACKSON COUNTY --- 2.3 W TAYLOR [44.32, -91.17], 0.7 S CITY PT [44.34, -90.32], 13.1 S CITY PT [44.16, -90.31], 2.0 NNE MELROSE [44.16, -90.99], 2.0 SSW NORTH BEND [44.07, -91.13]</b>				
	07/14/10 21:00 CST		0	Flood (due to Heavy Rain)
	07/15/10 03:00 CST		0	Source: Law Enforcement
Law enforcement reported several roads closed due to water over roadways in southern Jackson County.				

## Storm Data and Unusual Weather Phenomena - July 2010

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
<b>JUNEAU COUNTY --- 2.0 NW NECEDAH HORNSBURG AR [43.99, -90.03]</b>				
	07/14/10 21:00 CST		0	Heavy Rain
	07/15/10 01:00 CST		0	Source: COOP Observer
A cooperative observer three miles southeast of Necedah measured 3.22 inches of rain.				
<b>MONROE COUNTY --- 5.3 NNE FOUR CORNERS [44.15, -90.89], 2.4 NNE NORWAY RIDGE [44.15, -90.31], 3.8 ESE OAKDALE [43.94, -90.31], 4.3 WNW SPARTA [43.95, -90.90]</b>				
	07/14/10 21:00 CST		10K	Flash Flood (due to Heavy Rain)
	07/15/10 03:00 CST		0	Source: Law Enforcement
Law enforcement reported several roads closed due to washouts and water over roadways.				
<b>VERNON COUNTY --- 2.8 N ESOFEA [43.67, -90.97]</b>				
	07/14/10 21:05 CST		0.50K	Thunderstorm Wind (EG 56 kt)
	07/14/10 21:05 CST		0	Source: Law Enforcement
Law enforcement reported a few trees blown down near Koll Road.				
<b>VERNON COUNTY --- 1.6 NNE SPRINGVILLE [43.60, -90.94]</b>				
	07/14/10 21:10 CST		1.50K	Thunderstorm Wind (EG 56 kt)
	07/14/10 21:10 CST		0	Source: Law Enforcement
Law enforcement reported several trees down four miles northwest of Viroqua.				
<b>ADAMS COUNTY --- 4.9 SSE DELLWOOD [43.91, -89.93]</b>				
	07/14/10 21:35 CST		0	Thunderstorm Wind (EG 52 kt)
	07/14/10 21:35 CST		0	Source: Park/Forest Service
A park service employee estimated a sixty miles per hour wind gust at Castle Rock County Park.				
<b>ADAMS COUNTY --- 3.7 NE WHITE CREEK [43.87, -89.82]</b>				
	07/14/10 21:40 CST		0	Thunderstorm Wind (MG 56 kt)
	07/14/10 21:40 CST		0	Source: Amateur Radio
Amateur radio operators measured a wind gust of sixty-four miles per hour six miles south of Adams.				
<b>JUNEAU COUNTY --- 0.9 WSW ELROY MUNI ARPT [43.69, -90.27], 4.4 SE LYNDON STATION [43.68, -89.84]</b>				
	07/14/10 21:40 CST		7K	Thunderstorm Wind (EG 61 kt)
	07/14/10 21:53 CST		0	Source: Law Enforcement
Law enforcement reported trees and power lines down across southern portions of Juneau County.				
<b>VERNON COUNTY --- 2.1 SE SPRINGVILLE [43.56, -90.92], 0.9 NW VIROQUA [43.56, -90.89]</b>				
	07/14/10 22:24 CST		5.50K	Thunderstorm Wind (EG 56 kt)
	07/14/10 22:30 CST		0	Source: Law Enforcement
Law enforcement reported a shed damaged and trees down around the city of Viroqua.				
<b>VERNON COUNTY --- 0.9 SW WESTBY [43.64, -90.86]</b>				
	07/14/10 22:26 CST		0	Thunderstorm Wind (EG 52 kt)
	07/14/10 22:26 CST		0	Source: Amateur Radio
Amateur radio operators estimated a wind gust of sixty miles per hour one mile south of Westby.				
<b>VERNON COUNTY --- 0.2 NNE VIROQUA [43.55, -90.88], 1.5 WSW HILLSBORO [43.64, -90.38]</b>				
	07/14/10 22:40 CST		2.50K	Thunderstorm Wind (EG 56 kt)
	07/14/10 22:55 CST		0	Source: Law Enforcement
Law enforcement reported trees blown down from Viroqua to near Hillsboro.				

## Storm Data and Unusual Weather Phenomena - July 2010

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
<b>RICHLAND COUNTY --- 3.4 N VIOLA [43.55, -90.66], 1.0 NE VIOLA [43.51, -90.65], 1.4 S CAZENOVIA [43.50, -90.20], 2.3 N CAZENOVIA [43.55, -90.20]</b>				
	07/15/10 00:00 CST		10K	Flash Flood (due to Heavy Rain)
	07/15/10 08:30 CST		0	Source: Emergency Manager
The emergency manager reported several roads closed due to washouts and water over roadways in extreme northern Richland County.				
<b>VERNON COUNTY --- 2.9 NNE HILLSBORO KCKAPOO AR [43.69, -90.32], 1.9 SSE HILLSBORO KCKAPOO AR [43.63, -90.31], 2.6 SE DILLY [43.62, -90.39], 1.7 S TRIPPVILLE [43.70, -90.40]</b>				
	07/15/10 00:00 CST		2K	Flood (due to Heavy Rain)
	07/15/10 06:00 CST		0	Source: Law Enforcement
Law enforcement reported a few roads underwater around the city of Hillsboro.				
<b>A cold front tracked west to east across western and central Wisconsin during the afternoon and evening hours of July 14th. Severe thunderstorms developed along the cold front and produced severe wind gusts, funnel clouds, large hail and one tornado. The severe winds knocked trees down onto power lines and caused power outages across portions of central and western Wisconsin. Trained spotters estimated hail up to two inches in diameter near Osseo in Trempealeau County. The severe thunderstorms also produced an EF1 tornado in northern Jackson and southern Clark Counties. These storms also produce very heavy rain which caused flash flooding across southern Jackson, northern Monroe and Richland Counties. Law enforcement reported several roads closed due to water over roads and washouts. Cooperative observers and amateur radio operators reported rainfall amounts ranging from three to seven inches across southern Jackson and northern Monroe Counties.</b>				
<b>VERNON COUNTY --- 0.5 NNW HILLSBORO KCKAPOO AR [43.66, -90.33], 0.4 NW HILLSBORO KCKAPOO AR [43.65, -90.34], 0.4 NW HILLSBORO KCKAPOO AR [43.65, -90.33], 0.5 NNW HILLSBORO KCKAPOO AR [43.66, -90.33]</b>				
	07/14/10 23:30 CST		0	Flood (due to Heavy Rain)
	07/15/10 08:15 CST		0	Source: River/Stream Gage
Locally heavy rains pushed the South Branch of the Baraboo River out of its banks in Hillsboro on July 14th and 15th. The river exceeded the flood stage by over two feet cresting at 15.39 feet.				
<b>VERNON COUNTY --- 0.9 WNW LA FARGE [43.58, -90.65], 0.8 WNW LA FARGE [43.58, -90.64], 0.7 WNW LA FARGE [43.57, -90.64], 0.7 WNW LA FARGE [43.57, -90.64]</b>				
	07/15/10 16:45 CST		0	Flood (due to Heavy Rain)
	07/16/10 00:00 CST		0	Source: River/Stream Gage
Locally heavy rains pushed the Kickapoo River out of its banks at La Farge on July 15th. The river exceeded the flood stage by less than a half foot cresting at 12.16 feet.				
<b>VERNON COUNTY --- 2.8 NNE KICKAPOO CENTER [43.50, -90.67], 2.8 ESE LIBERTY [43.51, -90.68], 2.7 ESE LIBERTY [43.51, -90.68], 2.8 NNE KICKAPOO CENTER [43.50, -90.67]</b>				
	07/16/10 03:30 CST		0	Flood (due to Heavy Rain)
	07/17/10 05:00 CST		0	Source: River/Stream Gage
Locally heavy rains pushed the Kickapoo River out of its banks in Viola on July 16th and 17th. The river exceeded the flood stage by almost two feet cresting at 15.92 feet.				
<b>Rounds of heavy rain in mid July produced short flooding events on the South Branch of the Baraboo and Kickapoo Rivers (Vernon County).</b>				
<b>TAYLOR COUNTY --- 0.7 N MEDFORD [45.14, -90.35]</b>				
	07/20/10 14:33 CST		2K	Thunderstorm Wind (EG 52 kt)
	07/20/10 14:33 CST		0	Source: Law Enforcement
Several large trees were blown down in the city of Medford.				
<b>TAYLOR COUNTY --- 4.1 S DONALD [45.19, -90.91]</b>				
	07/20/10 15:02 CST		0.75K	Thunderstorm Wind (EG 52 kt)
	07/20/10 15:02 CST		0	Source: Emergency Manager
Three trees were blown down along County Highway H south of Miller Avenue.				
<b>TAYLOR COUNTY --- 0.5 W GILMAN [45.17, -90.81]</b>				

## Storm Data and Unusual Weather Phenomena - July 2010

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
	07/20/10 15:10 CST		0	Hail (1.25 in)
	07/20/10 15:14 CST		0.35M	Source: Emergency Manager

Hail fell in and around Gilman for about 5 minutes and ranged in size from three quarters of an inch up to 1.25 inches. The emergency manager reported some of the dime sized hail produced a swath of damage about a 1/2 mile wide and 4 miles long. Corn, beans and hay were stripped of their leaves and smashed down. The piles of hail along the roads in this area resembled plowed snow.

**Thunderstorms developed along a trough of low pressure over northern Wisconsin and produced large hail and damaging winds as they dropped south toward central Wisconsin on July 20th.**

---

### GRANT COUNTY --- 0.7 N ROCKVILLE [42.73, -90.68]

07/23/10 21:45 CST	0	Heavy Rain
07/24/10 01:15 CST	0	Source: Mesonet

An automated mesonet weather system measured 4.53 inches of rain in 3.5 hours. 2.82 inches of the total fell in one hour.

---

### GRANT COUNTY --- BURTON [42.72, -90.82]

07/23/10 21:45 CST	0	Heavy Rain
07/24/10 01:15 CST	0	Source: Mesonet

An automated mesonet weather system measured 3.28 inches of rain in 3.5 hours. 2.07 inches of the total fell in one hour.

---

### GRANT COUNTY --- 1.8 WSW DICKEYVILLE [42.62, -90.63], 1.9 WSW DICKEYVILLE [42.62, -90.63], 1.8 WSW DICKEYVILLE [42.62, -90.63], 1.8 WSW DICKEYVILLE [42.62, -90.63]

07/24/10 00:48 CST	7.50K	Flash Flood (due to Heavy Rain)
07/24/10 05:00 CST	0	Source: Emergency Manager

A new 20 foot bridge on Indian Creek Road about 2 miles west of the town of Dickeyville was washed out. Also, significant flooding was reported in the town of Dickeyville.

---

### GRANT COUNTY --- 4.1 NE PLATTEVILLE [42.78, -90.43], 1.6 S HAZEL GREEN [42.51, -90.43], 3.3 WSW FAIRPLAY [42.51, -90.63], 2.7 WNW FAIRPLAY [42.54, -90.62], 3.0 W KIELER [42.58, -90.66], 2.5 S TENNYSON [42.64, -90.68], 1.3 SSE CASSVILLE MUNI ARPT [42.70, -90.96], 2.8 S GLENHAVEN [42.79, -91.06]

07/24/10 01:18 CST	1.25M	Flood (due to Heavy Rain)
07/24/10 14:30 CST	0	Source: Emergency Manager

The Grant County Emergency Manager reported that U.S. Highway 151 was closed at the SW Road interchange. County Road B was also closed for a while. County Road O sustained substantial damage and was likely closed for around a week. County Road U sustained shoulder damage. Water was also over SW Road near the intersection with Pioneer Road in the southwest part of the city of Platteville. Newspaper articles indicate at least 90 homes throughout the county were damaged by the flooding. Some of the homes had water at least 5 feet above ground level. A two day rainfall total of 9.25 inches was measured at 6 a.m. CST on July 24th in Dickeyville. A three day rainfall total of 8.96 inches in Rockville was measured at 6 a.m. CST July 24th.

---

### BUFFALO COUNTY --- 0.5 E MONDOVI [44.57, -91.67]

07/24/10 01:40 CST	35K	Thunderstorm Wind (EG 52 kt)
07/24/10 01:40 CST	0	Source: COOP Observer

The COOP observer reported lots of trees and power lines down. Newspaper articles indicated that some of the fallen trees landed on houses creating roof damage and on a pickup truck smashing the roof and windshield.

---

### LA CROSSE COUNTY --- 1.1 NNE CALVERT [43.77, -91.21]

07/24/10 02:14 CST	5K	Thunderstorm Wind (EG 60 kt)
07/24/10 02:14 CST	0	Source: Amateur Radio

Amateur radio operators reported some trees blown down and others snapped off. Trees and signs were also blown down on the south side of La Crosse in the Shelby Mall area.

---

### LA CROSSE COUNTY --- 0.7 N BARRE MILLS [43.84, -91.12]

07/24/10 02:18 CST	1K	Thunderstorm Wind (EG 52 kt)
07/24/10 02:18 CST	0	Source: NWS Employee

A NWS employee reported a couple of trees and several large branches blown down.

**Thunderstorms developed along a cold front and brought very heavy rain to parts of southwest Wisconsin on July 23rd and 24th. This heavy rain created flooding problems that likely caused around a million dollars of damage in Grant County alone. Damaging winds from**

## Storm Data and Unusual Weather Phenomena - July 2010

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
these thunderstorms downed lots of trees, some of which landed on homes and vehicles.				
<b>GRANT COUNTY --- 2.1 ENE ROCKVILLE [42.73, -90.64], 2.2 ENE ROCKVILLE [42.73, -90.64], 2.1 ENE ROCKVILLE [42.73, -90.64], 2.2 ENE ROCKVILLE [42.73, -90.64], 2.2 ENE ROCKVILLE [42.73, -90.64]</b>				
	07/24/10 00:45 CST		0	Flood (due to Heavy Rain)
	07/24/10 08:30 CST		0	Source: River/Stream Gage
Locally heavy rains pushed the Platte River out of its banks in the vicinity of Rockville on July 24th. The river exceeded the flood stage by over three and a half feet cresting at 12.57 feet.				
<b>GRANT COUNTY --- 0.0 SW BURTON [42.72, -90.82], 0.1 NNE BURTON [42.72, -90.82], 0.1 NE BURTON [42.72, -90.82], 0.0 ESE BURTON [42.72, -90.82]</b>				
	07/24/10 01:30 CST		0	Flood (due to Heavy Rain)
	07/24/10 16:30 CST		0	Source: River/Stream Gage
Locally heavy rains pushed the Grant River out of its banks in the vicinity of Burton on July 24th. The river exceeded the flood stage by over two feet cresting at 20.32 feet.				
<b>Rounds of heavy rain late in July produced short flooding events along portions of the Grant and Platte Rivers (Grant County).</b>				
<b>ADAMS COUNTY --- 1.2 SE BIG FLATS [44.11, -89.78]</b>				
	07/27/10 12:11 CST		3K	Thunderstorm Wind (EG 52 kt)
	07/27/10 12:11 CST		0	Source: Public
A swath of trees was blown down.				
<b>ADAMS COUNTY --- BIG FLATS [44.12, -89.80]</b>				
	07/27/10 12:15 CST		2K	Thunderstorm Wind (EG 50 kt)
	07/27/10 12:15 CST		0	Source: Amateur Radio
Amateur radio operators reported trees blown down.				
<b>TAYLOR COUNTY --- 1.0 E WESTBORO [45.35, -90.28]</b>				
	07/27/10 20:12 CST		2K	Thunderstorm Wind (EG 52 kt)
	07/27/10 20:12 CST		0	Source: Amateur Radio
Amateur radio operators reported several trees blown down across County Road D.				
<b>Several rounds of thunderstorms developed ahead of a cold front and drifted across north central and central Wisconsin during the afternoon and evening of July 27th. These storms produced some sporadic wind damage.</b>				
<b>(WI-Z041) LA CROSSE, (WI-Z054) CRAWFORD</b>				
	07/27/10 12:45 CST		0	Heat
	07/27/10 17:00 CST		0	
The flow around an area of high pressure over the eastern Great Lakes and ahead of an area of low pressure over the Northern Plains brought hot and humid conditions to parts of southwest Wisconsin July 27th. The apparent temperature at La Crosse (La Crosse County) and Prairie du Chien (Crawford County) topped out at or above 105 during the afternoon.				